

# FILE NOTATIONS

Entered in NID File .....  
 Location Map Pinned .....  
 Card Indexed .....  
*✓*

Checked by Chief .....  
 Approval Letter .....  
 Disapproval Letter .....  
*7-16-68*

## COMPLETION DATA:

Date Well Completed .....  
*8-24-68*

Location Inspected .....

OW..... WW..... TA.....

Bond released

GW..... OS..... PA.....

State or Fee Land .....

## LOGS FILED

Driller's Log.....

Electric Logs (No.) .....  
*4*

IE..... I..... Dual I Lat..... GR-N..... Micro.....

BHC Sonic GR..... Lat..... Mi-L..... Sonic.....

CBLog..... CCLog..... Others.....

*compensated formation  
 density log & neutron  
 porosity log*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☐

OTHER Wildcat

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Mountain Fuel Supply Company

## 3. ADDRESS OF OPERATOR

P. O. Box 1129, Rock Springs, Wyoming 82901

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1980' FSL, 1980' FEL NW SE

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

10 miles north of Bluff, Utah

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

660'

(Also to nearest drlg. unit line, if any)  
18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

None if Bench

7600'  
#7 Bluff Bench

## 16. NO. OF ACRES IN LEASE

1760

## 19. PROPOSED DEPTH

6200'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

GR 5011'

## 22. APPROX. DATE WORK WILL START\*

July 17, 1968

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4	10-3/4	32.75	300	175 sacks
7-7/8	5-1/2	17	To be determined	

We would like your permission to drill the subject well to an anticipated depth of 6200'. Anticipated formation tops are as follows: Morrison-Summerville-Entrada-Carmel (undifferentiated) at the surface, Navajo at 950', Kayenta-Wingate 1700', Chinle 1975', Shinarump 2700', Moenkopi 2765', De Chelly 3060', Organ Rock 3180', Cutler Evaporites at 3840', Hermosa Group at 5030', Ismay zone at 5860', B Marker at 6050', Desert Creek at 6095', and Akah at 6195'.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

B.W. Croft

TITLE

General Manager,  
Gas Supply Operations

DATE

July 15, 1968

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

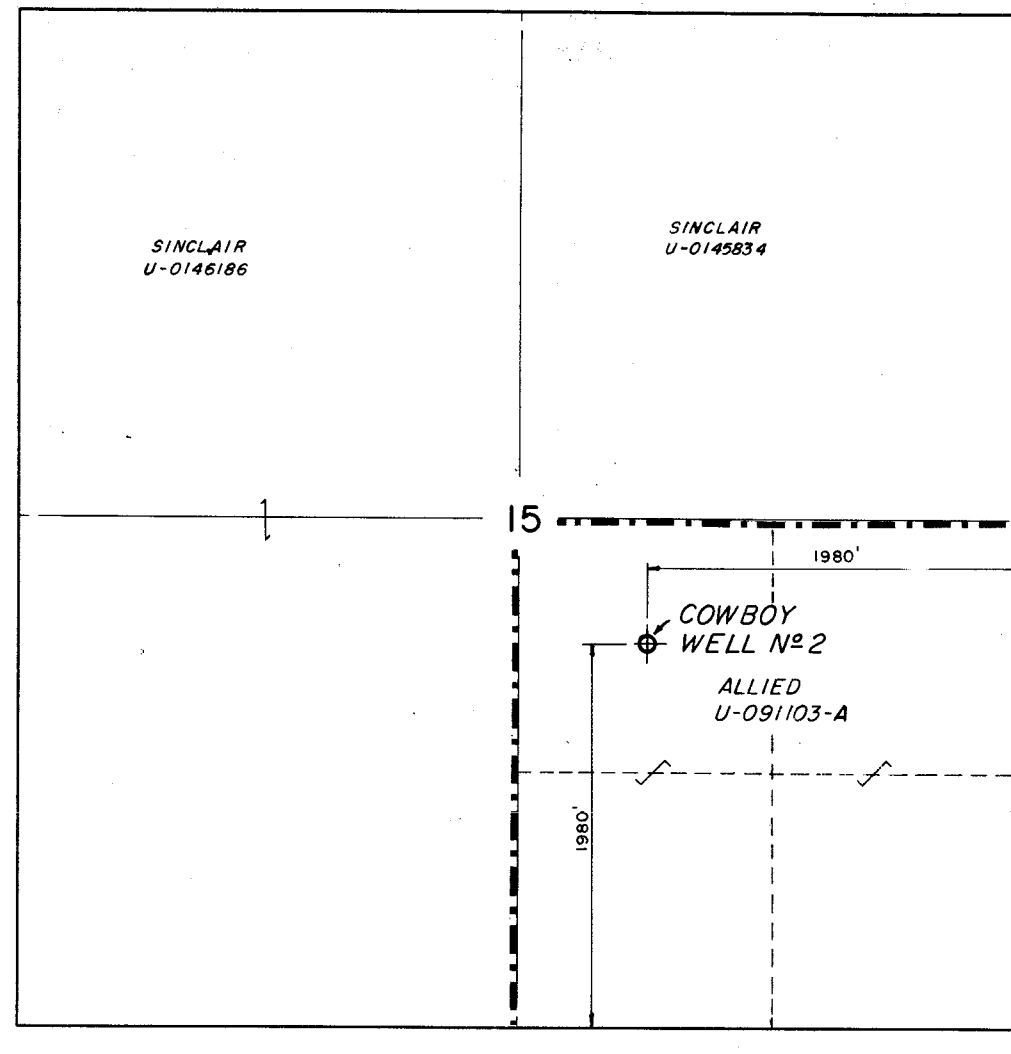
DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

43-037-30017

T.39S., R.22E. S.L.B. & M.  
UTAH



ENGINEER'S AFFIDAVIT

STATE OF WYOMING }  
COUNTY OF SWEETWATER } s.s.

I, K.A. Loya of Rock Springs Wyoming, hereby certify that this map was made from notes taken during an actual survey made under my direction by Ernst Engineering Co. Durango, Colorado on July 9, 1968; and that it correctly represents the location thereon with section measurements based on the official survey Plat of Township 39S., R.22E., S.L.B. & M. Utah.

*K.A. Loya*  
Engineer

Utah Registration No 2707

**LOCATION DATA**

WELL - Cowboy No 2

FIELD - Cowboy

**LOCATION**

1980' From South Line.  
1980' From East Line.  
NW SE Sec 15, T.39S., R.22E. S.L.B. & M.  
San Juan County, Utah

**ELEVATION**

5011' ground

**SURVEYED BY**

Ernst Engineering Co., Durango, Colorado


**DATE OF REPORT**

July 11, 1968

**REMARKS**

Well elevation natural ground.

REVISIONS			
NO.	DESCRIPTION	DATE	BY
	Well Name Corrected	7-15-68	D.G.H.

 <b>MOUNTAIN FUEL</b> SUPPLY COMPANY ROCK SPRINGS, WYOMING	
WELL LOCATION <b>COWBOY WELL No 2</b> NW SE SEC.15, T.39S., R.22E. S.L.B. & M. SAN JUAN COUNTY, UTAH	
DRAWN: 7-11-68 D.G.H.	SCALE: 1" = 1000'
CHECKED: <i>Rum</i>	DRWG. NO. M-9336
APPROVED: KAL	

July 16, 1968

Mountain Fuel Supply Company  
P.O. Box 1129  
Rock Springs, Wyoming 82901

Re: Well No. Cowboy #2,  
Sec. 15, T. 39 S., R. 22E.,  
San Juan County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL, Chief Petroleum Engineer  
HOME: 277-2890 Salt Lake City, Utah.  
OFFICE: 377-5771

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered while drilling. Your co-operation with respect to completing this form will be greatly appreciated.

Mountain Fuel Supply Company

July 16, 1968

-2-

The API number assigned to this well is 43-037-30017 (see Bulletin D12 published by the American Petroleum Institute).

Very truly yours,

DIVISION OF OIL AND GAS CONSERVATION

CLEON B. FIECHT  
DIRECTOR

CBF:jw

cc: U.S. Geological Survey  
Jerry Long, District Engineer  
Box 1809  
Durango, Colorado

Enclosures: Form OGC-8-X "Report of Water Encountered During Drilling"

p12 25

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Budget Bureau No. 42-R284.5  
Approval expires 12-31-60.

LAND OFFICE Utah  
LEASE NUMBER 091103-A  
UNIT .....

## LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County San Juan Field Cowboy Area

The following is a correct report of operations and production (including drilling and producing wells) for the month of \_\_\_\_\_, 19\_\_\_\_,

Agent's address P. O. Box 11368 Company MOUNTAIN FUEL SUPPLY COMPANY

Salt Lake City, Utah 84111

Signed E. Murphy

Phone 328-8315

Agent's title DIVISIONAL CHIEF ACCOUNTANT

SEC. AND ¼ OF ¼	TWP.	RANGE	WELL NO.	DAYS PRODUCED	BARRELS OF OIL	GRAVITY	CU. FT. OF GAS (In thousands)	GALLONS OF GASOLINE RECOVERED	BARRELS OF WATER (If none, so state)	REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
15	39S	22E	2		<u>Utah 091103-A Union Texas Petroleum</u>					Spudded 7-19-68 Drilling 4,410  7-31-68

Note.—There were \_\_\_\_\_ runs or sales of oil; \_\_\_\_\_ M cu. ft. of gas sold;

\_\_\_\_\_ runs or sales of gasoline during the month. (Write "no" where applicable.)  
Note.—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN THE  
(Other instructions  
reverse side)DATE  
n reForm approved.  
Budget Bureau No. 42-R1424

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Wildcat		5. LEASE DESIGNATION AND SERIAL NO. U-091103-A
2. NAME OF OPERATOR Mountain Fuel Supply Company		6. IF INDIAN, ALLOTTEE, OR TRIBE NAME -
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901		7. UNIT AGREEMENT NAME -
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1980' FSL, 1980' FEL NW SE		8. FARM OR LEASE NAME Cowboy
14. PERMIT NO. -		9. WELL NO. 2
15. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 5011'		10. FIELD AND POOL, OR WILDCAT Wilcoat
		11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA 15-39S-22E., SLB&M
		12. COUNTY OR PARISH 13. STATE San Juan Utah

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON\* ☐CHANGE PLANS ☐

## SUBSEQUENT REPORT OF

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☒ Supplementary historyREPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT\* ☐

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Depth 5993'. Core No. 1 cut 60' from 5851' to 5911', recovered 60'; Core No. 2 cut 13' from 5911' to 5924', recovered 13'; Core No. 3 cut 54' from 5924' to 5978', recovered 53'.

DST #1: 5938'-5943', IO 1 hour, ISI 4 1/4 hours, FO 1 hour, FSI 4 1/4 hours, opened with strong blow decreasing to weak, no gas, reopened, dead for 5 minutes then increased to weak no gas, recovered 90' drilling mud. IHP 2829, IOFP's 55-55, ISIP's 55-55, FOFP's 55-55, FHP 2829 psi.

18. I hereby certify that the foregoing is true and correct

SIGNED

B. A. Craft

TITLE

General Manager,  
Gas Supply Operations

DATE

August 13, 1968

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE



FIELD Cowboy STATE Utah COUNTY San Juan SEC. 15 T. 39 S. R. 22 E.

COMPANY Mountain Fuel Supply Co. FARM Cowboy WELL NO. 2

LOCATION 1980' FSL, 1980' FEL ELEV. 5022.05' K.B., 5011' Gr.

DRILLING COMMENCED July 19, 1968 COMPLETED August 21, 1968

RIG RELEASED August 24, 1968 TOTAL DEPTH 6252' Driller, 6258' Log

CASING RECORD 10-3/4" landed at 320.21' KBM with 175 sacks

TUBING RECORD

PERFORATIONS

I. P. GAS Dry, plugged and abandoned OIL

SANDS

SHUT-IN SURFACE PRESSURES

REMARKS Cored 5851'-6252' in 9 cores

	FROM	TO
Shale, reddish-brown and variegated, silty in part; trace of anhydrite; trace of sandstone, light to medium grey, very fine-grained to medium-grained, subrounded, very friable, no show.	4800	4830
Shale, as above; slight increase of sandstone, some coarse-grained quartz grains, subrounded; trace of anhydrite.	4830	4850
Shale, reddish-brown, silty to arenaceous in part, abundant variegated shale; some sandstone, light grey to medium brownish-grey, very fine-grained to coarse-grained, partly unconsolidated, abundant loose quartz grains, subrounded.	4850	4880
Ditto, decrease of loose quartz grains.	4880	4910
Shale, as above and medium brown, silty in part; some loose quartz grains, clear to tan, very fine-grained to medium-grained, subrounded to rounded, some frosted; trace of anhydrite.	4910	4960
Shale, reddish-brown and variegated, as above; reddish brown is calcareous, silty in part, block, some shale greyish brown, silty to arenaceous, calcareous, hard; decrease of loose quartz grains, as above; trace of limestone, light grey, hard and tight, dense.	4960	4980
Dominantly shale, as above, increase of limestone, light grey to light tan, dense, hard, tight, increase of sandstone, as above, mostly very fine-grained to light grey.	4980	5020
Ditto, variegated shale is mostly medium to dark maroon and brown; trace of anhydrite.	5020	5060
Ditto, some white earthy calcite.	5060	5090
Sandstone, light grey to white, very fine-grained to fine-grained, white, calcareous matrix; limestone, light grey to white (calcite) soft to hard, dense; shale, as above.	5090	5120
Shale, variegated, reddish brown and maroon, soft, silty in part, blocky; some sandstone, light grey to white, calcareous, very fine-grained to fine-grained, subrounded, no show; some limestone, as above (light grey).	5120	5150
Ditto; some brown shale is mica (muscovite); decrease of sandstone; some loose quartz grains, clear, medium-grained, angular to sub-rounded.	5150	5170

FIELD Cowboy SEC. 15 T. 39 S. R. 22 E. PAGE 2  
 FARM Cowboy WELL NO. 2  
 COMPANY Mountain Fuel Supply Company

	FROM	TO
Ditto, dominantly "red beds" (shale); trace of limestone and sandstone, as above.	5170	5230
Dominantly reddish-brown and variegated shale (abundant medium grey and maroon); some limestone, medium grey, very hard, dense, micro-crystalline; trace of sandstone, white to light grey, very fine-grained to fine-grained, subrounded, calcareous, friable, no show, some brownish-grey shale is silty and micaceous.	5230	5260
Shale, as above, increase of limestone, as above and light grey, very hard and dense.	5260	5270
Shale, medium brown, silty, micaceous, calcareous, arenaceous in part; some shale, as above; sandstone and limestone, as above; some sandstone, very fine-grained, medium brown, argillaceous to silty, calcareous, micaceous, friable, no show.	5270	5300
Sandstone, white to light grey, fine-grained to medium-grained, fairly well sorted, subrounded to subangular, calcareous, friable, increase of limestone, light grey, as above; some shale, as above.	5300	5310
Shale, variegated, as above; limestone, as above and some sandstone, as above; some fine-grained to medium-grained quartz, clear, subangular to subrounded.	5310	5350
Ditto; abundant shale, medium grey and light greenish-grey, soft to firm, calcareous; abundant variegated shale, as above.	5350	5380
Limestone, light grey, cryptocrystalline, hard, some shale and sandstone, as above; some grey limestone, as above.	5380	5400
Shale, reddish-brown, silty in part, some variegated shale, abundant light greenish-grey; some limestone, light to medium grey, dense, cryptocrystalline; some sandstone, light to medium grey, fine-grained, fairly well sorted; subrounded to rounded, hard and tight.	5400	5420
Ditto; increase of limestone.	5420	5440
Limestone, light to medium grey, arenaceous in part, mostly dense, hard; some sandstone, light grey to white, very fine-grained, subrounded, calcareous, friable, no visible porosity; trace of shale, as above.	5440	5510
Ditto; increase of variegated shale; decrease of sandstone.	5510	5530
Shale, light to medium grey, silty in part, micaceous, calcareous to slightly calcareous; some variegated shale and sandstone, as above, decrease of limestone, as above.	5530	5550
Limestone, light grey to tan and white, very hard and dense, cryptocrystalline in part, fossil debris in part, arenaceous in part; trace of shale and sandstone, as above.	5550	5585
Some limestone, as above; trace of sandstone, as above; abundant shale, dark grey, silty, micaceous, firm.	5585	5605
Increase of limestone, as above; some sandstone and light grey shale; dominantly limestone and sandstone; some variegated shale; some medium grey shale.	5605	5680
Limestone, light grey to light brown, very hard, cryptocrystalline, dense; sandstone, light to medium grey, very fine-grained to fine-grained, subrounded, fairly well sorted, calcareous; trace of loose quartz grains, subrounded, frosted to clear; shale, variegated, as above and medium to light grey and brown; some calcite, white, soft; medium grey and brown shale is silty in part.	5680	5705
Ditto, increase of medium grey shale.	5705	5730
Ditto; decrease of shale; increase of sandstone, light to medium grey, very fine-grained, hard and tight.	5730	5740
Limestone, as above; shale, medium grey and brown, as above; trace of variegated shale and trace of sandstone, as above.	5740	5750
Limestone and sandstone, as above; some calcite and medium grey shale, as above.	5750	5765
Ditto; increase of medium grey shale.	5765	5775
Shale, medium grey, silty in part, calcareous; some limestone and trace of sandstone, as above.	5775	5790

	FROM	TO
Limestone, medium brownish-grey and light grey, very hard, crypto-crystalline; chert, medium brown.	5790	5796
Shale, light to medium and dark grey, silty in part, calcareous to slightly calcareous; some limestone and trace of variegated shale, as above; some chert, as above.	5796	5811
Limestone, light grey to white, hard, dense, cryptocrystalline; some shale, as above; trace of chert, as above.	5811	5823
Limestone, as above; white calcite; some sandstone, light grey to white, very fine-grained, fairly well sorted, friable to hard, no show; shale, as above; some chert, medium brown to dark grey.	5823	5835
Ditto; increase of shale, medium grey, silty in part.	5835	5845
Ditto; increase of medium grey shale, as above, some dark grey shale, silty in part, few carbonaceous flakes; platy.	5845	5851
CORE #1 - 5851'-5911'. Cut 60'. Recovered 60'.		
Limestone, medium grey, very fine crystalline, argillaceous, dense, very hard; few fossils; few slickensides; tight.	5851	5855
Limestone, as above, becoming thinly bedded, more fossils, dense, hard, tight; becoming argillaceous in lower part.	5855	5865
Shale, medium to dark grey, silty to very calcareous.	5865	5872
Shale, very dark grey to black, very calcareous, silty, abundant small brachiopods.	5872	5877.5
Limestone, medium grey, fine crystalline, argillaceous, abundant fossil debris.	5877.5	5879
Limestone, dark grey, microcrystalline, argillaceous in part, very hard and tight; trace of chert.	5879	5884
Limestone, medium to dark grey, argillaceous, fine crystalline, hard and tight.	5884	5886.5
Limestone, medium grey, argillaceous to arenaceous, good porosity, small vugs, bleeding oil and gas.	5886.5	5888.5
Limestone, medium grey, fine crystalline, arenaceous to argillaceous in part, hard and tight, no show; some fine fossil debris in part, becoming lighter grey downward.	5888.5	5911
CORE #2 - 5911'-5924'. Cut 13'. Recovered 13'.		
Limestone, medium grey, very fine crystalline, argillaceous in part, slightly silty, fusulinids, hard and tight; few small anhydrite inclusions; dark grey to black chert at 5913.3 to 5913.7.	5911	5915
Limestone, as above; no fusulinids, abundant chert (25%), few stylolites.	5915	5924
CORE #3 - 5924'-5978'. Cut 54'. Recovered 53'.		
Limestone, medium grey, dense, microcrystalline, very hard and tight; stylolites and few tight fractures.	5924	5929
Limestone, medium grey (slightly darker than above) fine crystalline to microcrystalline, hard and tight, stylolites.	5929	5938
Limestone, as above; with small anhydrite inclusions; few fusulinids and some other fossil parts.	5938	5940
Limestone, dark to dark grey (could be called shale in part), very argillaceous to fine crystalline, very abundant fusulinids, hard and tight; stylolites.	5940	5943
Limestone, medium to dark grey, microcrystalline, argillaceous, anhydrite filling, some fusulinids, hard and tight.	5943	5947
Limestone, as above, abundant anhydrite, appears to have replaced fossil casts.	5947	5948
Limestone, light tannish grey, coquina, very good porosity from skeletal framework of fossil debris, partly filled with anhydrite, mostly open and oil saturated, some vuggy porosity.	5948	5955.5

FIELD Cowboy SEC. 15 T. 39 S. R. 22 E. PAGE 4  
 FARM Cowboy WELL NO. 2  
 COMPANY Mountain Fuel Supply Company

	FROM	TO
Limestone, dark grey, very abundant fossil debris, very argillaceous, abundant fusulinids and some brachiopods, some anhydrite filling; stylolites, hard and tight.	5955.5	5962
Limestone, as above; with less anhydrite; at 5967.5' is a 3" layer of rugosa corals, white to light tan, very abundant.	5962	5970
Limestone, as above, very abundant fossil debris, very argillaceous, with no fusulinids, very little anhydrite.	5970	5977
No recovery.	5977	5978
CORE #4 - 5978'-6019'. Cut 41'. Recovered 31.5'.		
Limestone, light to dark grey, fine crystalline, fossiliferous, hard, tight, some horizontal fractures; some shale, light to dark grey; 3" zone bleeding oil at 5995'.	5978	6006.5
Limestone, light grey, soft, very anhydritic, could be pores.	6006.5	6009.5
No recovery.	6009.5	6019
CORE #5 - 6019'-6079'. Cut 60'. Recovered 34'.		
Limestone, light grey, medium to fine crystalline, fossiliferous, horizontal fractures, some black limestone nodules, stylolites: bottom of core highly polished.	6019	6029.5
Limestone, dark grey, very fine crystalline, some carbonaceous material, some fractures and stylolites, bottom surface polished.	6029.5	6031.5
Limestone, as above.	6031.5	6036
Limestone, as above; bleeding oil.	6036	6037
Limestone, as above.	6037	6045
As above, bleeding oil, bottom of core polished.	6045	6046
Limestone, light grey, fine crystalline with several polished surfaces, some crumbs, etc.	6046	6053
No recovery.	6053	6079
CORE #6 - 6079'-6099'. Cut 20'. Recovered 17'.		
Shale, black, hard, dense, firm, fissile.	6079	6096
No recovery.	6096	6099
CORE #7 - 6099'-6142'. Cut 43'. Recovered 43'.		
Shale, black, hard, dense, limey, fossiliferous.	6099	6108
Limestone, light grey, fine crystalline, hard, tight, dense.	6108	6113
Dolomite, dark grey to black, very fine crystalline, dense, hard, tight, shaly, bleeding oil.	6113	6119
Dolomite, light grey, coarse crystalline, hard, dense, very tough.	6119	6133.5
Limestone, black to dark grey, very fine crystalline, very shaly, hard, tight.	6133.5	6142
CORE #8 - 6142'-6202'. Cut 60'. Recovered 54.5'.		
Limestone, light grey, fine crystalline, hard, dense, tight.	6142	6167
Limestone, light grey, coquina of algae, fair porosity, some large vugs, bleeding oil.	6167	6181
As above; with anhydrite filling, bleeding salt water.	6181	6194.5
Limestone, dark grey, very fine crystalline, hard, brachiopods; bleeding trace of salt water.	6194.5	6196.5

=====

	FROM	TO
CORE #9 - 6202'-6252'. Cut 50'. Recovered 48'.		
Missing core from bottom.		
Limestone, dark grey, medium crystalline, hard to tight.	6202	6206
Shale, black, fissile, siliceous, with some fossil brachiopods (orbiculoids) and pelecypods.	6206	6236.5
Limestone, dark grey to black, medium crystalline, hard, tight, siliceous in part, bleeding oil at 6242' (in 6" of core).	6236.5	6245
Limestone, as above, becoming argillaceous and dolomitic.	6245	6247
Shale, black, soft, clayey, with some anhydrite.	6247	6250
2' missing core from bottom.		

OCA/SSL:kjc  
10/15/68

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIP  
(Other instruction  
verse side)Form approved.  
Budget Bureau No. 42-R1424

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Wildcat	5. LEASE DESIGNATION AND SERIAL NO. U-091103-A
2. NAME OF OPERATOR Mountain Fuel Supply Company	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901	7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1980' FSL, 1980' FEL NW SE	8. FARM OR LEASE NAME Cowboy
14. PERMIT NO. -	9. WELL NO. 2
15. ELEVATIONS (Show whether DF, RT, GR, etc.) KB 5022.05' GR 5011'	10. FIELD AND POOL, OR WILDCAT Wildcat
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 15-39S-22E., SLB&M
	12. COUNTY OR PARISH San Juan
	13. STATE Utah

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

## SUBSEQUENT REPORT OF

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

Supplementary history

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

## 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Depth 6248', coring.

DST #2: 6079-6024', IO 1 hour, ISI 1 hour, FO 1 hour, FSI 1 hour 26 minutes, opened with weak blow, dead in  $\frac{1}{2}$  hour, reopened dead, no gas, recovered 90' drilling mud. IHP 8887, IOFP's 35-45, ISIP 295, FOFP's 45-45, FSIP 199, FHP 2897 psi.

DST #3: 6099-5978', IO 1 hour, ISI 1 hour, FO 1 hour, FSI 1 hour, opened with very weak blow, dead in 40 minutes, reopened dead, no gas to surface, recovered 45' mud. IHP 2887, IOFP's 45-44, ISIP 83, FOFP's 45-55, FSIP 64, FHP 2887 psi.

DST #4: 6142-6112', IO 1 hour, ISI 1 hour, FO 1 hour, FSI 1 hour, opened with very weak blow, dead in 6 minutes, reopened dead, no gas to surface, recovered 1' drilling mud. IHP 2916, IOFP's 26-26, ISIP 35, FOFP's 26-26, FSIP 26, FHP 2897 psi.

DST #5: 6202-6145', IO 1 hour, ISI 1 hour, FO 4 hours, FSI 4 hours, opened with very weak blow on both openings, no gas to surface, recovered 120' drilling mud and 100' slightly gas cut mud and 180' salt water. IHP 2966, IOFP's 50-81, ISIP 1816, FOFP's 102-214, FSIP 1994, FHP 2935 psi.

18. I hereby certify that the foregoing is true and correct

SIGNED

B. W. Croft

TITLE

General Manager,  
Gas Supply Operations

DATE August 21, 1968

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

(Jerry Long)  
Sharon

0118 9\*

PLUGGING PROGRAM FORM

Name of Company: Mt. Fuel Supply Co. Well Name: Cowboy #2  
Verbal Approval Given To: Bob Myers Sec. 15 T. 39S R. 22E County: San Juan  
Rock Spining, Wyo.  
Verbal Approval Was Given To Plug the Above Mentioned Well In The Following Manner:

Formations

Navajo	920'	1. plug from 6050'-6150'
Chinle	1956'	2. plug from 5000'-5100'
Shinarump	2671'	3. plug from 3000'-3100'
Moenkapi	2760'	4. plug from 1900'-2000'
DeChelly	3049'	5. plug from 300'-350'
Cogan Rock	3162'	10 sack plug at surface.
Cuttle reports	3897'	
Winnemucca	5034'	
Lamarg	5870'	
'B' marker	6070'	
Desert Creek	6112'	
Akaka	6212'	

Total Depth: 6252'

Date Verbally Approved: August 22, 1968 Signed: Sharon N. Dick

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPI  
(Other instructions  
verse side)E\*  
reForm approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U - 091103-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Cowboy

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., E., M., OR BLK. AND  
SURVEY OR AREA

15-39S-22E., SLB&amp;M

12. COUNTY OR PARISH 13. STATE

San Juan

Utah

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> Wildcat	
2. NAME OF OPERATOR Mountain Fuel Supply Company	
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 1980' FSL, 1980' FEL NW SE	
14. PERMIT NO. -	15. ELEVATIONS (Show whether DF, RT, GR, etc.) KB 5022.05' GR 5011'

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

FRACTURE TREAT

MULTIPLE COMPLETE

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREATMENT

ALTERING CASING

SHOOTING OR ACIDIZING

ABANDONMENT\*

(Other) Supplementary history

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

TD 6252', we propose to plug and abandon the subject well by laying the following plugs:

Plug No. 1: 6150-5950', 76 sacks  
Plug No. 2: 5100-5000', 57 sacks  
Plug No. 3: 3100-3000', 29 sacks  
Plug No. 4: 2000-1900', 38 sacks  
Plug No. 5: 350-290', 41 sacks  
Plug No. 6: Surface, 10 sacks

Verbal approval to plug and abandon the subject well was granted during a telephone conversation on August 22 with Mr. Long of the U.S.G.S. and a secretary with the Utah Oil & Gas Conservation held with Mr. Myers of Mountain Fuel.

18. I hereby certify that the foregoing is true and correct

SIGNED

B.W. Craft

TITLE

General Manager,  
Gas Supply Operations

DATE

August 27, 1968

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPI  
(Other instructions  
verse side)TE\*  
re-Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U - 091103-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Cowboy

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

15-39S-22E., SLB&amp;M

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL ☐ WELL GAS ☐ WELL OTHER ☐ Wildcat

2. NAME OF OPERATOR

Mountain Fuel Supply Company

3. ADDRESS OF OPERATOR

P. O. Box 1129, Rock Springs, Wyoming 82901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

1980' FSL, 1980' FEL

NW SE

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

KB 5022.05'

GR 5011'

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

TD 6252', dry and abandoned, rig released August 24, 1968.

The subject well was plugged and abandoned by laying the following plugs:

Plug No. 1: 6150-5950', 76 sacks  
Plug No. 2: 5100-5000', 57 sacks  
Plug No. 3: 3100-3000', 29 sacks  
Plug No. 4: 2000-1900', 38 sacks  
Plug No. 5: 350-290', 41 sacks  
Plug No. 6: Surface, 10 sacks

A regulation abandonment marker will be installed and the location cleaned at a later date.

18. I hereby certify that the foregoing is true and correct

SIGNED

B.W. Craft

TITLE

General Manager,  
Gas Supply Operations

DATE

August 27, 1968

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other in-  
structions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input checked="" type="checkbox"/>	Other _____										
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other _____								
2. NAME OF OPERATOR Mountain Fuel & Supply Company															
3. ADDRESS OF OPERATOR P. O. Box 1129, Rock Springs, Wyoming 82901															
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1980' FSL, 1980' FEL NW SE At top prod. interval reported below Same At total depth Same															
14. PERMIT NO. -				DATE ISSUED -											
15. DATE SPUDDED 7-19-68		16. DATE T.D. REACHED 8-21-68		17. DATE COMPL. (Ready to prod.) 8-24-68 <i>PA A</i>		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* KB 5022.05' GR 5011'		19. ELEV. CASINGHEAD -							
20. TOTAL DEPTH, MD & TVD 6252		21. PLUG, BACK T.D., MD & TVD 0		22. IF MULTIPLE COMPL., HOW MANY*		23. INTERVALS DRILLED BY 10-6252		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Dry and abandoned							
25. WAS DIRECTIONAL SURVEY MADE -								26. TYPE ELECTRIC AND OTHER LOGS RUN IES, Sidewall Neutron Porosity, BHC Sonic-GR, Comp. Formation Density		27. WAS WELL CORED Yes					
28. CASING RECORD (Report all strings set in well)															
CASING SIZE 10-3/4		WEIGHT, LB./FT. 32.75		DEPTH SET (MD) 320.21		HOLE SIZE 13-3/4		CEMENTING RECORD 175		AMOUNT PULLED 0					
29. LINER RECORD															
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*		SCREEN (MD)		TUBING RECORD					
-		-		-		-		-		-					
30. TUBING RECORD															
SIZE		DEPTH SET (MD)		PACKER SET (MD)		31. PERFORATION RECORD (Interval, size and number)									
-		-		-		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.									
-		-		-		-									
33. PRODUCTION															
DATE FIRST PRODUCTION Dry and Abandoned		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)						WELL STATUS (Producing or shut-in)							
DATE OF TEST		HOURS TESTED		CHOKE SIZE		PROD'N. FOR TEST PERIOD		OIL—BBL.		GAS—MCF.		WATER—BBL.		GAS-OIL RATIO	
-		-		-		-		-		-		-		-	
FLOW. TUBING PRESS.		CASING PRESSURE		CALCULATED 24-HOUR RATE		OIL—BBL.		GAS—MCF.		WATER—BBL.		OIL GRAVITY-API (CORR.)			
-		-		-		-		-		-		-			
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)												TEST WITNESSED BY			
35. LIST OF ATTACHMENTS IES, Neutron Porosity, BHC Sonic-GR, Formation Density, Well Completion, Well Lithology															
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records General Manager,															
SIGNED <i>BW Croft</i>				TITLE Gas Supply Operations				DATE August 29, 1968							

\*(See Instructions and Spaces for Additional Data on Reverse Side)

PI *[Signature]*

COMPLETION REPORT

Area: Cowboy Date: August 28, 1968

Well: Cowboy Well No. 2

<input type="checkbox"/> New Field Wildcat	<input type="checkbox"/> Development Well	<input type="checkbox"/> Shallower Pool Test
<input type="checkbox"/> New Pool Wildcat	<input checked="" type="checkbox"/> Extension	<input type="checkbox"/> Deeper Pool Test

Location: 1980 feet from South line, 1980 feet from East line  
NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  or  $\frac{1}{2}$

Section 15, Township 39 South, Range 22 East

County: San Juan State: Utah

Operator: Mountain Fuel Supply Company

Elevation: 5022.05 feet kelly bushing, 5011 feet ground

Drilling Commenced: July 19, 1968 Drilling Completed: August 21, 1968  
6252 feet Driller

Rig Released: August 24, 1968 Total Depth: 6258 feet Log, Plug Back Depth: -- feet

Log Tops:

Navajo	920'
Chinle	1956'
Shinarump	2671'
Moenkopi	2760'
De Chelly	3049'
Organ Rock	3162'

Log Tops:

Cutler Evaporites	3897'	
Hermosa	5034'	(-12')
Ismay	5870'	(-848')
"B" zone	6070'	(-1048')
Desert Creek	6112'	(-1090')
Akah	6212'	(-1190')

Producing Formation: --

Production: --

Status: Dry, plugged and abandoned

Perforations: --

Stimulation: --

Casing: 10-3/4" landed at 320.21' KBM with 175 sacks

Logging - Mud: None

Electric: Induction-Electric to 6258'; Gamma Ray, Sonic, Neutron Porosity and Density 900'-1300' and 5000'-6258'

Contractor: Cactus Drilling

Remarks: Cored 5851'-6252' in 9 cores

Area: CowboyWell: Cowboy Well No. 2Tabulation of Drill Stem Tests

<u>DST</u>	<u>Interval</u>	<u>IFP</u>	<u>ISIP</u>	<u>FFP</u>	<u>FSIP</u>	<u>Remarks</u>
1	5943'-5978'	59-61(60)	64(60)	64-64(253)	65(257)	NGTS, 90' mud
2	6023'-6078'	44-61(76)	306(61)	57-55(60)	207(86)	NGTS, 90' mud
3	5978'-6099'	57-59(60)	91(60)	65-65(60)	77(62)	NGTS, 45' mud
4	6112'-6142'	26-29(60)	39(60)	29-29(60)	32(62)	NGTS, 5' mud
5	6145'-6202'	55-101(60)	1643(60)	125-231(240)	2005(241)	NGTS, 120' mud, 100' slight gas cut mud, 180' salt water

VBG:kjc

FORM OGC-8-X

FILE IN QUADRUPLICATE

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL & GAS CONSERVATION  
1588 West North Temple

SALT LAKE CITY, UTAH 84111

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Cowboy Well No. 2  
Operator Mountain Fuel Supply Company Address Box 11368, S.L.C. Phone 328-8315  
Contractor Cactus Drilling Address \_\_\_\_\_ Phone \_\_\_\_\_  
Location NW 1/4 SE 1/4 Sec. 15 T. 39 N R. 22 E San Juan County, Utah  
S W

Water Sands:

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
From	To	Flow Rate or Head	Fresh or Salty
1. 6142'	6202' ✓	180' DST recovery	Salty
2.			
3.			
4.			
5.			

(Continued on reverse side if necessary)

Formation Tops: Desert Creek 6108'

Remarks:

- NOTE:
- (a) Upon diminishing supply forms, please inform this office,
  - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See back of form)
  - (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

CIRCULATE TO:  
DIRECTOR  
PETROLEUM ENGINEER  
MINE COORDINATOR  
ADMINISTRATIVE ASSISTANT  
ALL  
RETURN TO Kathy  
FOR FILING

☒ P  
☐  
☐  
☐  
☒

P

June 25, 1976

MEMO FOR FILING

Re: Mountain Fuel Supply Co.  
Cowboy #2  
Sec. 15, T. 39 S., R. 22 E.  
San Juan County, Utah

This plugged and abandoned dry hole was checked on June 15, 1976. The location looked clean and the vegetation was profound for the general area. The regulation dry hole marker was erected and the well was properly identified.

PATRICK L. DRISCOLL  
CHIEF PETROLEUM ENGINEER

PLD:tb

cc: U. S. Geological Survey